UK Government

ENERGY RESILIENCE GROUP

Government Response to NESO's North Hyde Report

Developing an Energy Resilience Strategy and setting the North Hyde Implementation Plan

November 2025

Contents

Executive Summary

Great Britain (GB) has a highly resilient energy system, which underpins every aspect of life here. Maintaining a safe and reliable energy system is fundamental to public services, the economy and to the operation of our Critical National Infrastructure (CNI) sectors. Energy disruptions, such as that caused by the fire at North Hyde, have shown how quickly cascading impacts can affect multiple sectors.

The National Energy System Operator's (NESO) review into North Hyde Substation Outage was commissioned jointly by the Secretary of State for Energy Security and Net Zero and Ofgem in March 2025. The review report was published in July 2025 and made several recommendations to drive improvements to energy resilience across GB.

The Government Response to NESO's report is a joint endeavour between government, the gas and electricity industry and the regulator (Ofgem). The **aim of the Government Response is to set a clear implementation plan to make progress against NESO's recommendations, and to set out DESNZ's commitment to improve GB energy resilience through an Energy Resilience Strategy**.

Energy Resilience Strategy

The Government's Clean Energy Superpower Mission will drive a sector-wide transformation, offering a critical opportunity to further embed security and resilience into system design, strengthening energy reliability.

DESNZ will seize this opportunity by developing an Energy Resilience Strategy, to be published in 2026, setting out strategic priorities to ensure a secure, resilient energy system now and in the future.

The Energy Resilience Strategy will embed resilience into the design of the future energy system by taking a holistic approach to identifying the key opportunities available to the sector and setting a clear ambition for system resilience, which can be incorporated into the delivery of the Clean Energy Superpower Mission to ensure energy security and resilience is maintained throughout the transition.

North Hyde Implementation Plan

The North Hyde Implementation Plan will set out specific actions to enhance resilience across the three pillars of NESO's Review

1. **Resilience of energy infrastructure** - To uphold and enhance the resilience of energy infrastructure, actions will review the current level of risk across the energy system. Amongst other things, this will share best practices on asset management and fire safety and identify opportunities for improvement.
2. **Response and restoration of energy infrastructure** - Actions to support the response and restoration of energy infrastructure target improvements to liaison between energy operators and both local responders and other critical operators.

3. **Enhancing the resilience of critical infrastructure to energy disruption** - To enhance resilience of critical infrastructure to energy disruption, actions have been identified to develop guidelines and expectations for power resilience across all CNI.

The newly established Energy Security and Resilience Taskforce, chaired by the Energy Minister and comprising senior energy sector representatives, will oversee and assure the implementation of these actions. The Energy Resilience Leadership Group (ERLG), a senior cross government and industry board, will monitor progress throughout the implementation period and take decisions on delivery risks. The Energy Resilience Group North Hyde Task Group, which was established following the publication of NESO's North Hyde Report, will be responsible for the delivery of all energy sector actions.

The ERLG will also govern the DESNZ led actions. Where engagement with Other Government Departments is required, DESNZ will engage with the Major Energy Risk Board, a senior Cross-Government board which oversees the risk planning and preparedness process for significant energy risks.

The majority of actions will bolster the energy industry's prevention and preparedness for exceptional events, reducing the likelihood and impact of energy disruption. While improvements will be made, no energy system can be totally immune from disruption, which is why, in tandem, these actions will support other CNI sectors in enhancing their own resilience to such events as far as is reasonably practicable

Part 1: Introduction

The fire at North Hyde Electrical Substation which broke out on 20th of March 2025 brought into focus the importance of energy resilience across Great Britain (GB). While incidents like North Hyde are extremely rare on our energy system, when they do occur, we see the wide-reaching consequences of significant disruptions to energy supply, even with an existing comprehensive suite of business continuity and emergency arrangements. Government is committed to learning from incidents such as the North Hyde substation fire, and ensuring these lessons are used to enhance the resilience of GB's energy system and reduce the impacts of these incidents when they do occur.

The Secretary of State for Energy Security and Net Zero and Ofgem commissioned the National Energy System Operator (NESO) to do just that in a three-month review[1] immediately following the incident. NESO published their final report[2] on 2 July 2025 which presents the root cause of the incident, explains why the power outage occurred, and provides recommendations for improving the resilience of essential services, including Critical National Infrastructure (CNI)[3], to energy disruption in the future.

Following NESO's publication, the Department for Energy Security and Net Zero (DESNZ) committed to consider the findings of the review and publish a Government Response. This report, which references NESO's publication throughout, sets outs how GB will address the 12 recommendations made by NESO in respect to the incident at North Hyde.

This report also sets out how we will seize opportunities to improve GB's energy resilience through the Net Zero Transition and as we deliver Clean Power 2030. Climate change, technological development, and growing geopolitical and economic disruption must influence the decisions we make when it comes to maintaining and improving the resilience and security of the GB energy system. In parallel, the interdependencies between energy and essential services are becoming more complex, meaning disruptive impacts from loss of energy supply can have broad impacts across society. This includes complex impacts to essential services such as water, transport and telecoms, which can be incredibly disruptive to everyday life.

We must consider these factors alongside the incident at North Hyde and other cross cutting energy incidents across the globe – such as the recent widespread power outages across the Iberian Peninsula in April 2025.NESO published its report[4] of the Iberian incident earlier this year in the context of Great Britain's network resilience. The Iberian incident was not due to a single failure but resulted from a complex series of

[1] NESO review into the North Hyde Substation outage: terms of reference - GOV.UK
[2] North Hyde Review | National Energy System Operator
[3] CNI refers to the systems, assets, and services essential to the functioning of the UK. The loss or compromise of these could severely impact national security, public safety, or the delivery of essential services - Critical National Infrastructure- NPSA.gov.uk.

[4] Energy Explained: Future-Proofing GB's Power System: Reflections on the April 2025 Iberian Event | National Energy System Operator

cascading events and voltage control issues leading to a system-wide collapse. The report makes clear that our energy system is highly resilient to the factors which influenced the Iberian incident and the likelihood of a total failure of power supplies in GB remains low. These strengthen our ambition to ensure energy resilience across GB. Now is the right time to take meaningful action to safeguard the reliability and resilience of GB's energy network.

1.1 Background

Our energy infrastructure supports the delivery of electricity, gas, and fuel, to homes, businesses, and critical public services and utilities. GB's energy networks are made up of a vast range of assets, from large stretches of cabling and piping, thousands of individual monitors and switches, all the way to large sites such as the North Hyde Substation which supply tens of thousands of customers – including CNI. The effective operation of each one of these assets is important to ensuring that energy reaches those who need it.

NESO's North Hyde report confirms that GB has one of the most reliable energy systems in the world with comparatively few supply disruption events affecting consumers – highlighting that in 2023/24 the overall reliability of supply for the National Electricity Transmission System in GB was reported as 99.999930%. There is continuing work across industry, Government and the regulator to maintain and improve resilience. However, no system can be completely immune from disruption, irrespective of the level of investment.

NESO's report is clear that incidents such as the fire of the in-service transformer at North Hyde Substation are rare across the energy system - with this being the first fire at an in-service supergrid transformer since 2013. However, the fire at North Hyde disconnected 71,655 domestic customers, who were restored quickly, and commercial electricity customers, including a part of Heathrow Airport's private internal electrical distribution network. Heathrow Airport Limited then took the decision to close the airport due to the impact of the outage on some of its operationally critical systems.

This highlights the profound impact a single shock on the energy system can have, with the potential to trigger cascading effects across critical sectors and society at large. Even in a highly resilient energy system, disruptive impacts can still occur and therefore it is important that other sectors take responsibility for their own business continuity in the event of disruption to energy supplies.

NESO's report made 12 recommendations to drive improvements to energy resilience across GB, as summarised in Table 1 below.

Table 1: Summary of NESO's recommendations[5]

Topic	Recommendation (summarised)
Asset management systems	1. Energy asset management processes and systems should include robust controls to ensure that identified issues are appropriately categorised and followed up on.
Maintenance actions	2. Asset owners should review the suite of mitigating actions deployed in the case of overdue maintenance to ensure they are comprehensive and capable of identifying issues likely to lead to asset failure with potential impacts on security of supply.
Fire and asset risk assessments	3. Fire and asset risk assessments should be in place for all energy facilities (including electricity and gas distribution, transmission, storage etc.) and explicitly cover all assets, and site level risk.
Site accessibility for emergency services	4. Network asset owners and relevant emergency services should take the lessons learnt from the North Hyde incident to identify any required improvements to site and substation specific emergency management plans.
Visibility of total site risk	5. Overall risk assessments at an asset and site level should be undertaken.
Electricity Safety, Quality and Continuity Regulations (ESQCR)	6. Government and regulators should refresh guidance available on ESQCR.
Incident management protocols	7. For every CNI site, incident management protocols should explicitly include plans around loss or impairment of energy supplies.
Resilience of infrastructure with multiple supply points	8. Where a CNI or essential service site has multiple supply points connected to the energy system, explicit consideration should be given by the site operator to the level of resilience and operational continuity required, and how this can be achieved.
Energy resilience of CNI	9. CNI operators should be able to have transparent conversations, then work together with energy networks (transmission and/or distribution as appropriate) and system operators to review and establish a mutual understanding of the resilience and security of the energy supply arrangements to the CNI site.
	10. CNI operators should develop a communication and operational protocol for addressing any planned and unplanned changes to resilience.
	11. NESO and the government should work together to develop an appropriate holistic view of the CNI reliance on the energy system.
	12. CNI operators, government and the relevant regulatory bodies should establish a more structured approach to energy resilience, for example via cross-sector partnerships and standards, including standards around continuity of operations under various scenarios.

[5] NESO full recommendations are published in their report, page 07-09: North Hyde Review | National Energy System Operator

1.2 Structure of the Government Response

This main body of the Government Response has been split into two parts to set out how Government and relevant partners will continue to work together to maintain a secure and resilient energy network and GB energy resilience across the short and long term.

Part 2: Launching the Energy Resilience Strategy

- sets out DESNZ's wider ambition for GB energy resilience now and in the future, seizing the opportunity to embed long-term resilience through the development of an Energy Resilience Strategy.

Part 3: North Hyde Implementation Plan

- sets out our implementation plan to address each of the 12 recommendations set by NESO while also laying the groundwork for the Energy Resilience Strategy.

Next Steps

- Sets out the governance structures that will ensure the delivery of the Government and industry led actions and summarises the commitments made in this Government Response.

Part 2: Launching the Energy Resilience Strategy

The **Government's Clean Energy Superpower Mission will lead to a once in a generation transformation** across the energy sector, **ensuring secure and affordable energy supply for customers** and **driving economic growth** by fostering new technologies. Renewable technologies will be rapidly deployed, network infrastructure will be significantly upgraded and expanded, and digital solutions will revolutionise how the energy sector meets consumer demand.

The risk landscape facing the GB energy sector is also undergoing rapid and complex transformation. Climate change is intensifying the frequency and severity of extreme weather events, such as storms, floods, and heatwaves, that pose direct threats to energy infrastructure and operational continuity. At the same time, the sector faces growing risks from malicious actors, including cyberattacks targeting critical systems and geopolitical tensions that could disrupt supply chains and energy markets. These converging challenges demand a more adaptive, resilient, and security-conscious approach to energy system planning and operation.

The energy transition offers a critical opportunity to build a stronger and more resilient energy system, maintaining and enhancing reliability through resilience focused design. Unless resilience is built into the design of the energy transition, increases in the threat and hazard landscape have the potential to elevate the likelihood and frequency of events like North Hyde, raising costs in the long-term from the direct impacts of energy disruption and the need to implement expensive retrofitted mitigations. The 10 Year

Infrastructure Strategy[6] and Resilience Action Plan[7] both highlight the need to build resilience and reliability into the system design of sectors through proactive intervention, including through the potential strengthening of resilience standards. This is further supported by recommendations from the National Infrastructure Commission[8], the Climate Change Committee[9], and the National Preparedness Commission[10].

DESNZ will seize the opportunities to enhance resilience during the energy transition. It will publish an Energy Resilience Strategy in 2026, setting out this government's strategic priorities to ensure a secure and resilient energy system now and in the future. The Energy Resilience Strategy will include proposals for how we will work with the energy sector, partners in other critical sectors, and wider society to address the risks and challenges facing the system, strengthening prevention, preparedness, response and recovery.

The **Energy Resilience Strategy** will focus on three strategic objectives:

1. **Understand vulnerability and risk throughout the clean energy transition and beyond**

   In line with the Government's Resilience Action Plan, we will develop and maintain a comprehensive understanding of the whole energy system, the risk landscape and the interaction between them now, through the clean energy transition and beyond.
2. **Reducing Risk Through Resilient Infrastructure Design**

   Enable a secure clean energy transition by addressing the evolving structure and future demands of the energy system, ensuring new assets are designed with security and resilience, in line with the recommendations set out in the Government's 10-Year Infrastructure Strategy.
3. **Strengthening preparedness, response and recovery**

   Ensure that comprehensive, cross-cutting plans are in place to respond and recover to the threats and hazards facing the GB energy sector, and that plans are regularly tested and exercised with a focus on continuous improvement.

The **Energy Resilience Strategy will address sector specific challenges** across the entire energy system, like those identified following the North Hyde incident. It will set out this government's ambition to build power sector resilience across society, including the critical sectors that rely on energy to deliver our critical services, and it will create a framework to embed resilience across the energy system now and in the future.

[6] UK Infrastructure: A 10 Year Strategy
[7] UK Government Resilience Action Plan
[8] Developing resilience standards in UK infrastructure
[9] Progress in adapting to climate change: 2025 report to Parliament
[10] Assessing Energy System Resilience in the UK to 2050

Part 3: Lessons from North Hyde Substation Fire

3.1 Introduction into implementation plan

While the Energy Resilience Strategy will set out our strategic priorities to ensure a secure and resilient energy system, we must also take immediate action to address the learnings for the incident at North Hyde Substation.

This section sets out our implementation plan to drive improvements across the three pillars of the North Hyde Substation Review, as set out in the Terms of Reference.[11]

1. **Resilience of Energy Infrastructure**
2. **Response and Restoration of Energy Infrastructure**
3. **Enhancing the resilience of Critical National Infrastructure to Energy Disruption**

NESO's report proposes **12 recommendations which aim to improve the resilience of essential services, including Critical National Infrastructure (CNI), to energy disruption in the future**. In partnership with the Energy Resilience Group (ERG), DESNZ has translated these into a series of whole energy system actions, with delivery targeted over the next 12 months. ERG is a partnership between government, energy regulators and industry (including NESO) to support and foster effective collaboration on GB energy sector security, resilience, security of supply and emergency preparedness. ERG reports into the newly established Energy Security and Resilience Taskforce, which is chaired by the Energy Minister.

This implementation plan commits to a mixture of **short- and medium-term projects which will bolster the industry's prevention and preparedness for exceptional events** such as that which occurred at North Hyde Substation. Industry led actions have been designed to focus on the most critical parts of the energy network, across both electricity and gas, to deliver the broadest possible impact to GB energy consumers in the first instance. These actions lay the groundwork for the Energy Resilience Strategy and our longer-term ambition for GB energy resilience, as set out in Part 2.

Some actions set out in the implementation plan go beyond the recommendations of NESO's North Hyde Report, as DESNZ and ERG seize the opportunity to drive forward wider energy resilience priorities.

[11] Review into the North Hyde Substation outage: terms of reference - GOV.UK

3.2 Resilience of Energy Infrastructure

NESO report made 5 recommendations (1-3, 5-6) to improve the resilience of energy infrastructure through improvements to energy asset management, maintenance and fire safety processes and the regulations that underpin these processes. The actions set out in this chapter will drive improvements across each of these areas.

DESNZ and ERG will also take further action on the opportunity that learnings from North Hyde presents to mitigate risk on the energy system through design.

3.2.1 Energy Asset Management and Maintenance

What did NESO's report say?

In this case, the existing protocols for logging and scheduling routine maintenance at North Hyde Transmission substation were not sufficient to identify that essential maintenance had not been actioned. Protocols also did not fully consider the potential widespread impacts should a failure of this asset occur.

The incident at North Hyde also highlighted the importance of understanding how critical assets are co-ordinated and managed across the energy system so that decisions on asset management are properly informed, considering whole energy system risk.

What are we doing about it?

Our energy infrastructure is designed and built to last decades, withstanding the rigours of use and exposure to the elements. These assets require regular testing to ensure that they can be relied upon to deliver the high standards of operation that is expected from our energy system. It is also essential that, when defects are identified or when assets are near end-of-life, proper maintenance is undertaken to preserve the operational integrity of these systems.

ERG will address NESO recommendations **by carrying out two energy system wide reviews** to deliver **asset management and risk assessment best practices**. Through these reviews we will agree an approach to effectively enable **prioritisation of asset management, considering whole energy system risk and wider society impacts should those risks materialise.**

Asset Management and Risk Assessment Best Practices

NESO's recommendations:

1. *Energy asset management processes and systems should include robust controls to ensure that identified issues are appropriately categorised and followed up on, including regular reviews of outstanding items. Particular attention should be paid to any area reliant on manual controls*

5. *Overall risk assessments at an asset and site level should be undertaken (which would incorporate the fire and asset risk assessments as set out in recommendation 3). This should incorporate and mitigate any cumulative or compounding risks (e.g., catastrophic failure of one asset having a wider impact on the continued operation of the site).*

It is important that we consider ways to **enhance our assurance of energy asset management and risk assessment processes**. The energy sector will review existing asset management processes considering:

- If existing arrangements for **safe and effective lifecycle management** of critical energy assets are fit for purpose.
- If there are opportunities, so far as reasonably practicable, to **improve existing arrangements.**
- How to create greater alignment with **recognised good practice and innovation**.

The varied and wide-reaching nature of our energy system means that the review of the **health, safety, and design of assets requires prioritisation**. While each asset is important, there are sections of the network which supply larger areas with the potential for more significant and widespread consequences should they fail. Therefore, ERG's review will focus **on existing extra high voltage substation asset management arrangements and equivalent assets on the network**.

Ofgem are already considering the **current compliance approach to ensure that positive asset management changes are being properly adopted and embedded** into company practices across the whole energy system.[12] Over the next 6 months Ofgem will consider if **independent audits and inspections are required to provide assurance that the reliability of critical network assets is being appropriately managed**.

[12] https://www.ofgem.gov.uk/sites/default/files/2024-07/RIIO_3_SSMD_Overview.pdf

Prioritisation of Asset Management

NESO's recommendation:

2. *Asset owners should review the suite of mitigating actions deployed in the case of overdue maintenance to ensure they are comprehensive and capable of identifying issues likely to lead to asset failure with potential impacts on security of supply. Consideration should also be given to the use of the most up-to-date technology (e.g., continuous monitoring) to monitor the condition of critical assets.*

ERG, with the support of DESNZ, will also **review existing arrangements for customer connections considered to be strategically critical in terms of gas and/or electricity system resilience and determine recommendations for improvement**.

The review will focus, so far as reasonably practicable, on **system resilience and continuity** and ensure all customer connections classified as playing a strategically critical role are **sufficiently robust and can be called upon when needed**. It is important to note that this review is focused on connections critical for continued operation of the energy system.

The outputs will not replace the requirement for other sectors to develop and assure **their own business continuity plans for the loss of energy supply**. DESNZ, Ofgem and ERG will work together to consider how the outputs of this review may be considered to enable **additional resilience for these critical customer connections**, where **improvements remain** in the interest of energy consumers and wider GB society.

Output

The actions outlined below will **strengthen cross-industry knowledge sharing**, identify any **further areas for improvement in asset management processes** and mechanisms to deliver those improvements.

The outputs will further **reduce the likelihood of deferred maintenance** and other asset management decisions resulting in disruptive incidents for energy consumers. This will in turn reduce **frequency of disruption to customers, preventing wider impacts to society.**

Actions: Energy Asset Management

Code	Action	Owner	Deadline
M1	**ERG to review existing extra high voltage substation asset management arrangements and identify opportunities for improvement for the whole energy system.**	ERG	Autumn 2026
M2	**Ofgem to consider the need for independent audits and inspections to provide assurance that the reliability of critical network assets are being appropriately managed.**	Ofgem	Spring 2026

M3	**ERG will review existing arrangements for critical customer connections to Gas and Electricity infrastructure systems and provide recommendations for improvement to address any identified weaknesses in existing arrangements.**	ERG	Spring 2026
M4	**Ofgem, DESNZ and ERG to consider potential options, on a case-by-case basis, to provide additional resilience for critical customer connections to Gas and Electricity infrastructure.**	Ofgem, DESNZ and ERG	Spring 2026

3.2.2 Energy Asset Fire Safety

What did NESO report say?

Fire risk assessments are often carried out by third parties, with no common approach across the sector to considering the wider site-level and downstream impacts of any potential fire. In the case of North Hyde Substation, the fire risk assessment did not include a site-level assessment of the risk of a fire on the substation compound. There was therefore no consideration of the proximity of other oil-filled assets or the suppression systems ability to prevent fire spread.

The review also identified a need to improve guidance on regulatory roles and responsibilities in relation to Electricity Safety, Quality and Continuity Regulations 2002 (ESQCR) compliance, beyond the Health and Safety Executive 'safety aspects' of the regulations.

What are we doing about it?

Sites on the energy system are designed so that, typically, fires are not able to spread to neighbouring assets. This inbuilt redundancy works to ensure, in most cases, continued operation of assets in the event of fire. However, North Hyde highlighted the need to review and potentially enhance these measures, particularly considering different design of assets and effectiveness of mitigations in place.

We will deliver NESO's recommendation through a **review of existing fire safety standards** in the sector and the **regulations which underpin these standards**.

Enhancing fire risk assessments

NESO's recommendation:

3. *Fire and asset risk assessments should:*
   - *Be in place for all energy facilities (including electricity and gas distribution, transmission, storage etc.) and explicitly cover all assets, and site level risk;*
   - *For site level assessments, cover the situation where there are multiple assets on a site, potentially controlled by different parties;*
   - *explicitly include consideration of new or updated standards, even if there is no requirement to be retrospectively compliant;*
   - *Be updated (or explicitly cater for) when relevant equipment is unavailable or out of service; and*
   - *Incorporate input from the fire service, including on firefighting protocols*

Some energy system assets come with an inherent safety risk due to the high-voltage, high-pressure, or hazardous nature of the processes involved. It is essential therefore that appropriate safety systems, including fire-suppression systems, are present, tested, and maintained wherever required.

ERG, considering **existing legislation and regulation for fire safety**, will review current approaches across the sector **to site risk assessments** to determine, (so far as is reasonably practicable) **fit for purpose, risk-based fire arrangements** are in place for extra high voltage substations**.** The review will result in an **understanding of the risks** and **mitigations** that can be applied for extra high voltage substations in the different scenarios known to the sector. Such an approach and mitigations will be applied to other energy infrastructure as appropriate.

Updating regulatory guidance for effective delivery

NESO's recommendation:

6. *Government and regulators should refresh guidance available on ESQCR, including clarifying roles and responsibilities.*

It is imperative that existing regulations related to the safety and security of energy assets are effective in providing clarity to the sector on expectations and responsibilities of asset owners. Given the vast changes being made across the energy system to account for technological advances and innovation and to deliver Clean Power 2030, it is timely to consider the need to review Electricity Safety, Quality and Continuity Regulations 2002. DESNZ, working closely with HSE and Ofgem will consider the effectiveness of existing ESQCR guidance and update to ensure clarity on roles and responsibilities.

Output

The actions outlined will ensure **sufficient and proportionate fire safety measures** are in place at extra high voltage substations, and other energy infrastructure as appropriate. Such **standards will reduce the risk** of another incident like North Hyde re-occuring on our energy system through **increased resilience to a fire risk**. This will support the ambition of reducing the overall likelihood and impact of energy disruption on energy consumers and society.

Actions: Energy Asset Fire Safety

Code	Action	Owner	Deadline
F1	**ERG will consider and agree risk-based fire standards for extra high voltage substations, applying standards to other energy infrastructure as appropriate.**	ERG	Spring 2026
F2	**DESNZ, HSE and Ofgem to consider effectiveness of current ESQCR guidance and update as needed.**	DESNZ, HSE and Ofgem	Spring 2026

3.2.3 Mitigating Risk Through Design

What did NESO's report say?

While National Grid Electricity Transmission's current standards for fire controls at substation sites prioritise distance and physical barriers between oil-filled equipment, neither of these measures were in place at North Hyde 275kV substation site as it was built prior to the application of these standards.

What are we doing about it?

Our energy system is made up of thousands of assets which were designed and built across many decades, and in some cases to different standards than what is required today. In the intervening period, the number and type of services and sites dependent on those assets has also changed – such as an increased dependency of Critical National Infrastructure on power supply. Notwithstanding the need for CNI sites to have robust business continuity arrangements in place, North Hyde is just one example of an asset on our energy system where this had a material impact on the risk to the site. This may also be the case with other energy assets, and we must act in the short term to mitigate other potential risks to sites like North Hyde and in the long term through the Energy Resilience Strategy.

Understanding potential risk from historic energy design standards

In the short term, more can be done to **understand the risks presented by differing asset or site design** at extra high voltage substations like North Hyde. ERG will **complete a review of existing design standards for similar substation assets**. The review will consider **existing arrangements for the safe and resilient design** of extra high voltage substations and equivalent sites and **determine if there are opportunities for improvement**. The review will also include the **suitability of current system** and **asset resilience standards and make recommendations for improvement**. The

knowledge collected through this process will thereafter inform the **implementation of the Energy Resilience Strategy**.

Considering the need for new design standards

The Energy Resilience Strategy will take a whole-system, long-term approach to assessing and considering enhancements to design standards. As suggested in the HMT 10-year Infrastructure Strategy and the Resilience Action Plan, we will consider the **need for the introduction of new resilience standards for the energy sector**. Any standards introduced will be **outcome focused**, to ensure that our future energy system is **designed to be resilient to the evolving risk and threat landscape**, ensuring the security of our energy system through the **Clean Power 2030 mission and beyond**.

Output

The output will be a **whole energy system understanding of potential risks** associated with **various design standards** assessed and a **list of the identified opportunities** for improvement, potentially through the introduction of **new energy resilience standards**. This will allow proportionate action to be taken to ensure **site risks remain at a tolerable level**, reducing the risk of impacts on GB energy consumers now and through the transition.

Actions: Mitigating risk on the energy system through design

Code	Action	Owner	Deadline
D1	**ERG will consider opportunities to mitigate risk through design at extra high voltage substations and equivalent sites across the whole energy system, feeding output into action D2.**	ERG	Autumn 2026
D2	**DESNZ, as part of the Energy Resilience Strategy, and following advice from ERG on opportunities to mitigate risk by design across the whole GB energy system, will consider the need for new specifications and/or standards as we transition to Net Zero.**	DESNZ	Autumn 2026

3.3 Response and restoration of energy infrastructure

The NESO report made 3 recommendations (4, 7, 10) to improve the response and restoration of energy infrastructure through improvements to liaison processes between local responders, Government and Critical National Infrastructure (CNI) sectors, and the approach to restoring supplies when incidents do occur. The actions set out in this chapter will drive improvements across each of these areas.

3.3.1 Liaison during Restoration

What did NESO's report say?

The four principal parties who attended the substation site at North Hyde immediately following the fire were National Grid Electricity Transmission, Scottish and Southern Electricity Networks Distribution, the Metropolitan Police Service, and London Fire Brigade. Overall, this review suggests that parties worked collaboratively on the site to facilitate access for safety switching, which then allowed London Fire Brigade to start tackling the fire. However, lessons should be learned to **further improve emergency plans.**

Electricity Network Operators, Government and impacted CNI sectors, namely Heathrow Airport Limited, also remained in regular communication throughout the incident at North Hyde. NESO's report notes the importance of liaison between the energy sector and other CNI sectors, during incidents and more generally risk preparedness to allow for better decision making. Certain CNI sector operators have roles under the Civil Contingencies Act (2004) [CCA] as Category 1 or 2 responders. The CCA is underpinned by statutory and non-statutory guidance, which provides a basis for multi-agency working between Category 1 and 2 responders. However, there is currently limited specific guidance which details how the CNI sectors should engage during emergencies beyond their Category 1 and 2 roles, or how those without Category 1 or 2 responder status should participate.

What are we doing about it?

As no physical system can be immune from disruption, irrespective of the level of investment, an important part of GB energy resilience is ensuring there are **effective response plans and measures in place** to actual or potentially disruptive incidents. These plans must set out **expectations and procedures** to enable the **sharing of information** and, where necessary, **effective joint decision making** between all relevant parties during significant energy incidents.

The incident at North Hyde highlighted two key cohorts where there are opportunities to improve liaison with energy network operators during emergencies; local responders and other CNI sector operators.

Energy Network Operators and Local Partners

NESO's recommendations:

4. *Network asset owners and relevant emergency services should take the lessons learnt from the North Hyde incident to identify any required improvements to site and substation specific emergency management plans. This should include any learnings related to access requirements and where there is a single site with multiple assets under the control of different parties. These should be shared and incorporated into fire and asset risk assessments as appropriate.*

Effective liaison with local partners during large-scale energy incidents is critical to mitigating impacts on domestic customers. Certain energy utility providers, such as holders of electricity transmission and distribution licences have existing procedures and protocols to engage with local responders in their role as a Category 2 responders, prescribed in the Civil Contingencies Act 2004 (CCA). For example, the Priority Services Register (PSR) is a register of vulnerable customers who may need additional support. Both Gas and Electricity Network Operators are required to maintain the PSR and have procedures to share it with local responders during energy incidents.

Situational awareness between Gas and Electricity Network Operators and Local Partners allows for:

- A better understanding of what, how and why energy disruption has occurred;
- Development of a pathway to restore customers as quickly as possible, and;
- Supporting Category 1 responders, such as the Fire and Police, in delivering their essential functions.

This was a key finding in the Storm Arwen Review[13], which delivered a programme of work to set the standards and expectations on network operators to communicate effectively with local responders.

North Hyde presents an opportunity **to further improve this liaison**, particularly considering critical energy sites which operate with shared ownership (i.e., between transmission and distribution network operators).

The energy sector, working with local responders, will:

a) Consider existing multi-agency arrangements under the CCA; and
b) Propose a revised approach for energy system specific events, in line with their statutory duties under the CCA.

Using the North Hyde incident as an example, this work will consider whether it would be more effective to have in place a **bespoke energy system management procedure** which focusses on the energy system incident instead of utilising standard/ generic multi-agency arrangements. Such an approach would ensure engagement is effective

[13] https://www.gov.uk/government/publications/storm-arwen-electricity-distribution-disruption-review

in supporting the wider local response without delaying restoration efforts on the energy system.

Energy Network Operators, Government and CNI Sector Customers

NESO's recommendations:

7. For every CNI site, incident management protocols should explicitly include plans around loss or impairment of energy supplies. These protocols should include a mechanism to convene all relevant parties (including network companies, system operators, regulators, government etc. as appropriate.

10. CNI operators should develop a communication and operational protocol for addressing any planned and unplanned changes to resilience.

The incident at North Hyde saw DESNZ and NESO convene an operational coordination forum to facilitate the sharing of information among stakeholders. Attendees included National Grid Electricity Transmission, SSEN Distribution, Heathrow Airport Limited, UK Power Networks Services, DESNZ, and Ofgem. This was a first of its kind forum which was found to be mutually beneficial to Electricity Network Operators, Heathrow Airport Limited, as a commercial customer with its own internal electrical distribution network, and Government during the management of the incident. Therefore, a mechanism to bring together all relevant operational parties during significant energy incidents should be developed.

As an initial step and building on existing established energy sector practice, ERG will develop guidance on how to identify and manage significant incidents, including engagement with Ofgem, DESNZ, NESO and other involved parties as applicable. This will include a process for operational communications between CNI operators impacted, escalation processes, and procedure for the real-time management and communication of significant incidents affecting the energy sector.

To support this work and encourage appropriate cross-sector engagement on risk preparedness and response, DESNZ will work across relevant government departments, such as the Department for Transport, and Devolved Governments to set expectations and principles for how CNI operators should engage during and in preparation for significant incidents. This will ensure cascading impacts from disruption to CNI infrastructure are better understood by operators and, during incidents, are more effectively managed. This engagement should not be limited to energy sector incidents which impact other CNI sectors, but also disruption to other essential services like water and telecoms which may impact the energy sector.

Output

The actions below will **drive enhancements to liaison processes** across those partners and operators **essential for maintaining public health and safety**, ensuring

continuity of essential services as far as reasonably practicable. This will reduce the overall level of disruption and impact to GB society when energy emergencies occur by delivering **a more coordinated and effective response** across all relevant parties.

Actions: Liaison with the Energy Sector and other Critical National Infrastructure

Code	Action	Owner	Deadline
L1	**ERG will improve liaison with Category 1 and Category 2 responders during significant energy system specific events**	ERG	Winter 2025/26
L2	**ERG will formalise guidance for escalation and management of significant energy sector incidents, including engagement with Ofgem, DESNZ, NESO and other involved parties as applicable.**	ERG	Winter 2025/26
L3	**DESNZ, working across relevant Lead Government Departments and Devolved Governments, will set out principles for how CNI sectors should engage and share information in both preparing for disruption and responding to incidents.**	DESNZ	Winter 2025/26

3.3.2 Restoration of Energy Customers

What did NESO's report say?

Restoration of customers supplies following the fire at North Hyde occurred within expected timeframes. In 12 hours all except two of the 66,919 domestic and commercial customers directly supplied by SSEN Distribution had power restored. The two customers which remained off supply were able to utilise their own backup generators for supplies, which proves the value of having robust and effective business continuity arrangements in place

NESO's report found that the design and configuration of Heathrow Airport's private internal electrical distribution network meant that the loss of one of its three independent supply points would result in the loss of power to operationally critical systems. Heathrow Airport had plans in place to suspend operations to respond to such an event, and the plans noted that the reconfiguration of the network would take approximately 10-12 hours. Operations at the airport could not resume until the re-configuration of their internal network was completed within the expected timescales.

An additional 4,736 domestic and commercial customers of Independent Distribution Network Operators also lost power during the incident. Power was restored to these customers by 15:00 on Friday 21 March 2025.

NESO's report did not make any recommendations to improve energy sector restoration processes, however ERG and DESNZ will take action to ensure approaches to energy customer restoration are consistent across the whole energy system and remain fit for purpose.

What are we doing about it?

Electricity Network operators are required to treat all electricity customers equally and as such are unable to prioritise one customer over another. Not discriminating between customers is a long-standing principle for the operation of public electricity supplies within GB and this requirement is enshrined in the Electricity Distribution Licence under Standard Licence Condition 19[14]. Clear and practical restoration processes are an integral part of the resilience of GB's energy network.

Due to these plans, domestic customers were able to be restored within hours following the incident at North Hyde while work was ongoing to restore all customers as soon as possible. However, the incident challenged existing planning assumptions for how restoration processes consider varying impacts across different cohorts of energy customers (i.e., the loss of supply to a key CNI operator may result in secondary impacts far beyond the initial disruption to energy supply).

Whilst the focus of Network Operators must continue to be on restoring all customer supplies as quickly and safely as possible, North Hyde highlighted the need to ensure that there is a **consistent and risk-based approach taken in energy restoration**.

A risk-based approach to restoration of energy supplies

ERG will **develop and implement guidance** across all Electricity Network Operators which can be used where there are decisions to be made about the **respective speed of restoration across different customers**. The guidance will take into account different customer cohorts served by energy infrastructure systems and set out a risk-based approach to be used by energy companies during unplanned events. It will meet UK legislation and regulatory requirements to **ensure informed and appropriate conclusions are reached.**

DESNZ will use the information gathered by energy companies to determine, as part of the Energy Resilience Strategy, if any **changes are needed to UK legislation and regulation** to ensure restoration of energy supplies can be carried out in the way **least impactful to society**, while continuing to restore all customers in a timely manner.

Whole Energy System Emergency Coordination

The increasing dependence of essential services (i.e., emergency services and water) on continued energy supplies and the complex interdependencies within the whole energy system (i.e., electricity on gas for power generation) also presents an opportunity to explore the need for whole energy system emergency coordination.

The incident at North Hyde showed how an issue on an asset on the transmission network impacted the connected distribution network and therefore downstream customers connected to that network. Decisions made on one part of the energy network, where appropriate, should consider potential cascading impacts across the whole energy system and the associated impacts on energy customers and GB society.

[14] Electricity Distribution Consolidated Standard Licence Conditions

Through the Energy Resilience Strategy, DESNZ will work with the energy sector to **determine the need for such a coordinator** or if **current frameworks have sufficient vires** to make such whole energy system considerations during large scale incident affecting more than one part of the energy system.

Output

The actions below will determine the **options and relevant regulatory requirements** when considering **prioritising energy restoration to different customer cohorts** during unplanned events and for taking whole energy system decisions during large scale incidents. This will ensure the future energy system manages disruptive incidents, as far as reasonably practicable, to minimise the worse impacts on GB society.

Actions: Restoration of Energy Customers

Code	Action	Owner	Deadline
R1	**ERG will review existing arrangements and develop industry guidance for the restoration of CNI and other customer energy supplies during unplanned events.**	ERG	Winter 2025/26
R2	**As part of the development of the Energy Resilience Strategy and following output of R1, DESNZ will consider if existing legislation should be amended to allow for different treatment of electricity customers which are designated as CNI.**	DESNZ	Summer 2026
R3	**Through the development of the Energy Resilience Strategy, DESNZ will consider the need for a Whole Energy System Emergency Coordinator with specific powers to take response decisions at a whole energy system level.**	DESNZ	Summer 2026

3.4 Enhancing the resilience of critical infrastructure to energy disruption

NESO report made 4 recommendations (8-9, 11-12) to improve the resilience of critical infrastructure to energy disruptive through increased understanding of interdependencies between critical energy system assets, the reliance of other CNI sector on energy supplies and the risk disruption to those energy supplies, including what it means to be resilient to that disruption.

The actions set out in this chapter include both immediate 'first step' measures, such as NESO updating existing guidance on the risk to electricity customer's supply to inform CNI operators' continuity planning, and longer-term reforms such as exploring options for standards and regulatory incentives.

What did NESO's report say?

There are opportunities, for sites like Heathrow Airport Limited which have multiple electricity supply points, to enhance the level of resilience to power disruption. Electricity Network Operators can inform such enhancements.

Energy network operators are not aware whether customers connected to their networks are classified as CNI, though work is underway to identify and analyse cross-sector interdependencies.

There is currently no cross-sector requirement on CNI operators to ensure specifically the continuity of operations in response to power disruption.

What are we doing about it?

The whole of society depends on a functioning energy system, particularly power (and gas, as an enabler for power) to operate. As GB advances digitalisation and electrification to meet Net Zero goals, dependency on power will only increase. Power disruptions, such as that caused by the fire at North Hyde, have shown how quickly cascading impacts can affect multiple sectors.

While efforts continue to strengthen the energy system, it is not feasible to eliminate the possibility of disruption. Therefore, **enhancing the resilience of other CNI sectors** to energy disruption is essential for the reduction of cross-sector impacts and maintenance of essential services. Incidents like the Heathrow shutdown, and the Iberian power outage (which was not due to a single failure but resulted from a complex series of cascading events and voltage control issues leading to a system-wide collapse, of which GB is highly resilient to these factors) highlight the need for **sector-level preparedness**. This preparedness provides an effective mitigation to all potential risks to energy supply, not just for what happened at North Hyde, creating cost efficiencies.

Informing CNI sectors on the risk to power supplies

NESO's recommendations:

8. *Where a CNI or essential service site has multiple supply points connected to the energy system, explicit consideration should be given by the site operator to the level of resilience and operational continuity required, and how this can be achieved.*

9. *CNI operators should be able to have transparent conversations, then work together with energy networks (transmission and/or distribution as appropriate) and system operators to review and establish a mutual understanding of the resilience and security of the energy supply arrangements to the CNI site.*

NESO's report highlighted the importance of mutual understanding between network operators and Critical National Infrastructure customers on site connections arrangements. More can be done to ensure that both network operators and CNI operators have the **information needed to make informed decisions** on energy resilience. It also highlights the importance of **maintaining a two-way information** flow between CNI sites and network operators, with a mutual responsibility to collaborate. There is a need to **better educate CNI operators** on the risk to their power supply and the importance of back-up generation

The energy sector developed power resilience guidance following the 9 August 2019 power disruption incident which led to the automatic disconnection of 1.5 million customers, with power restored within 45 minutes. The event highlighted the potential cascading impacts of short-term disruption on other sectors, and the **need for sector-specific resilience planning for essential services**. Essential services guidance was developed to address this issue and circulated to CNI sectors via lead Government Departments.

ERG will build on this existing guidance to **develop and publish a generic set of essential business continuity guidelines** for CNI sites to help ensure business continuity independence, and clear **interface arrangements** with reliant energy (Gas and/or Electricity) systems. To ensure clarity, the guidelines will include a number of **different scenario-based examples that typify good practice alignment** with the generic guidelines. They will make clear how CNI locations should interface with reliant energy systems, including operational communications.

Mapping critical dependencies within the energy sector and with other CNI sectors

NESO's recommendation:

11. *NESO and the government should work together to develop an appropriate holistic view of the CNI reliance on the energy system*

There is a need to **develop an appropriate holistic view of the CNI reliance on the energy system** to understand how potential risks may impact GB and to support mitigations and contingency plans for these risks. Work is underway between DESNZ and NESO, as part of the Cabinet Office criticalities process, to assess the criticality of all energy assets and systems, and understand how wider cross-sector CNI assets depend on and support these energy assets.

NESO is the independent technical body with a whole energy system remit with specific obligations for future system planning. Under Condition 6 of the Electricity System Operator Licence and Condition 5 of Gas System Planner Licence, NESO has obligations to advise DESNZ on which electricity and gas infrastructure should be CNI, including systems that, if compromised, could cause cascading impacts across the sector, as well as potential future CNI. The importance of this work has been highlighted by the incident at North Hyde and action must be taken to accelerate this work.

That is why DESNZ have asked NESO to review the methodology underpinning CNI designation assessments across the gas and electricity sectors and to **conduct a full review of gas and electricity CNI in 2026**. This will enable a more robust process for identifying CNI in the energy sector. However, as North Hyde showed, it is also critical to understand dependencies between Energy and other CNI. DESNZ is working with other Lead Government Departments across Government **to map cross-sector dependencies.**

Embedding power resilience across CNI

NESO's recommendation:

12. *CNI operators, government and the relevant regulatory bodies should establish a more structured approach to energy resilience, for example via cross-sector partnerships and standards, including standards around continuity of operations under various scenarios (e.g., loss of an energy asset).*

The Government's approach to energy resilience across CNI is underpinned by clear sectoral accountability. Sectoral Lead Government Departments (LGDs) play a key enabling role by **helping industry interpret resilience guidance**, developing **tailored**

plans, and aligning with national resilience principles. The Resilience Action Plan, published in July 2025, sets out the coordinated and holistic approach needed to improve UK resilience; this includes a review of existing resilience and security standards for CNI, both reserved and devolved, and targeted interventions where gaps and vulnerabilities remain.

Cross-cutting risks should be tackled collectively to ensure common standards, avoid duplication and efficiently deploy resources. It is the responsibility of the Cabinet Office to set the direction for these types of risk and coordinate a whole-of-government response with support from LGDs. In some contexts, LGDs will also lead on cross-cutting risks where they have a specific competency and expertise.

Although DESNZ and the energy industry provide some strategic guidance on energy resilience, the responsibility for implementing resilience measures rests with individual sectors. All CNI sectors are expected to:

- **Assess risk and plan for continuity**: Understand dependencies on energy supply and develop continuity plans to maintain essential functions during disruptions.
- **Invest in resilient infrastructure**: Prioritise secure energy connections and backup power supplies such as batteries, for critical sites from the earliest stages of site development.
- **Integrate resilience operationally**: Embed energy resilience throughout the asset lifecycle, identifying and delivering quick wins such as backup systems and enhanced monitoring.
- **Lead delivery**: Take ownership of resilience planning and investment, ensuring sector-specific needs are met, as far as reasonably practicable, without reliance on the energy sector or its consumers.

Clear accountability ensures that **resilience is embedded within sectoral operational and planning frameworks** where it can be most effectively delivered.

To drive meaningful improvements in power resilience across CNI, sectors must be supported not only by guidance but, where appropriate, by **targeted regulatory levers that incentivise investment**. These levers will vary by sector and are the responsibility of sectors themselves. The UK Infrastructure: A 10 Year Strategy, the Security and Defence Review and the Resilience Action Plan set out a clear approach to **close the vulnerability gap across CNI**, with progress in this space requiring a Cross-Government effort, coordinated by the Cabinet Office

The forthcoming DESNZ Energy Resilience Strategy will consider **options for embedding power resilience** across all CNI sectors, including via standards.

Ofgem, the independent energy regulator, will support this work by continuing engagement with other relevant CNI sector regulators, such as the Civil Aviation Authority and Ofcom, to share best practice from the energy sector and advise on options to incentivise power resilience in their responsible sectors.

Output

The actions outlined in this report will help drive this ambition across all CNI, enabling **sectors to plan, invest, and operate with greater confidence and preparedness**.

The proposed actions outlined below will help to **minimise cascading impacts** during disruptive energy events by ensuring sectors are **equipped to maintain essential functions**. This will assist in **determining requirements, proportionate investment** to ensure **robust and effective arrangements** are in place, testing to ensure they deliver the desired outcomes and **completing regular tests** to ensure they remain effective and meet objectives. The focus is not on eliminating risk entirely, but on enabling sectors to respond effectively and sustain operations during any disruption.

Actions: Power Resilience of Critical National Infrastructure

Code	Action	Owner	Deadline
C1	**ERG will publish essential business continuity guidelines for CNI assets reliant on energy (Gas and Electricity) infrastructure systems to effectively inform CNI operators**	ERG	Spring 2026
C2	**DESNZ to consider messaging for CNI sectors to amplify the importance of energy resilience specifically in business continuity plans. DESNZ and Cabinet Office to play a coordinating role to amplify this messaging.**	DESNZ and Cabinet Office	Winter 2025/26
C3	**NESO will review the methodology underpinning CNI designation assessments across the gas and electricity sectors. This will include formalising and updating the gas and electricity CNI thresholds.**	NESO	Winter 2026
C4	**NESO and DESNZ will work together, while considering existing understanding of critical connections to the energy system, to scope options to streamline current mapping of dependencies between Energy and other CNI. NESO will work closely with DESNZ to ensure the appropriate data management process is put in place to deliver this action.**	NESO and DESNZ	Spring 2026
C5	**As part of the Energy Resilience Strategy, DESNZ, working across government, will consider options for embedding power resilience across all CNI sectors.**	DESNZ	Spring 2026
C6	**Ofgem to engage relevant CNI sector regulators, such as the Civil Aviation Authority, on options to incentivise investment in power resilience in their own sectors.**	Ofgem	Winter 2025/26

4. Next Steps

This plan will be delivered through existing structures where industry, regulators, and Lead Government Departments already meet and work together.

Delivery of Industry (ERG) Actions

The newly established UK Energy Security & Resilience Taskforce, chaired by the Minister of State for Energy Security, **will assure the delivery of industry lead actions**. The Taskforce, which held its inaugural meeting on the 16 October 2025, aims to strengthen the security and resilience of GB energy Critical National Infrastructure.

The Energy Resilience Group (ERG) North Hyde Task Group, which was established following the publication of NESO's North Hyde Report, will be responsible for the **delivery of all energy sector actions** set out in this Government response. The ERG North Hyde Task Group will provide quarterly updates on progress and action close out to the DESNZ chaired Energy Resilience Leadership Group (ERLG). ERLG consists of senior representatives from DESNZ, Ofgem, NESO, National Gas (in their System Operator role) and the Chair of ERG.

Delivery of Government Actions

The delivery of government actions, will be governed by the Energy Resilience Leadership Group. Where engagement with Other Government Departments is required, DESNZ will engage with the Major Energy Risk Board (MERB). The MERB, which is co-chaired by Cabinet Office and DESNZ, oversees the Cross-Government risk planning and preparedness process for significant energy risks, including those related to electricity, gas and fuel with a cross-sector impact.

The ERLG will submit a final report to the Taskforce following completion of actions set out in this report.

Collectively, the actions and Energy Resilience Strategy will result in **a safer, more resilient, and more secure energy system** which will **help deliver the Clean Energy Superpower Mission, providing for customers into the 2050s and beyond.**

5. Summary of Government Response Commitments

Code	Action	Owner	Deadline
Energy Asset Management			
M1	**ERG to review existing extra high voltage substation asset management arrangements and identify opportunities for improvement for the whole energy system.**	ERG	Autumn 2026
M2	**Ofgem to consider the need for independent audits and inspections to provide assurance that the reliability of critical network assets are being appropriately managed.**	Ofgem	Spring 2026
M3	**ERG will review existing arrangements for critical customer connections to Gas and Electricity infrastructure systems and provide recommendations for improvement to address any identified weaknesses in existing arrangements.**	ERG	Spring 2026
M4	**Ofgem, DESNZ and ERG to consider potential options, on a case-by-case basis, to provide additional resilience for critical customer connections to Gas and Electricity infrastructure.**	Ofgem, DESNZ and ERG	Spring 2026
Energy Asset Fire Safety			
F1	**ERG will consider and agree risk-based fire standards for extra high voltage substations, applying standards to other energy infrastructure as appropriate.**	ERG	Spring 2026
F2	**DESNZ, HSE and Ofgem to consider effectiveness of current ESQCR guidance and update as needed.**	DESNZ, HSE and Ofgem	Spring 2026
Mitigating risk on the energy system through design			

D1	**ERG will consider opportunities to mitigate risk through design at extra high voltage substations and equivalent sites across the whole energy system, feeding output into action D2.**	ERG	Autumn 2026
D2	**DESNZ, as part of the Energy Resilience Strategy, and following advice from ERG on opportunities to mitigate risk by design across the whole GB energy system, will consider the need for new specifications and/or standards as we transition to Net Zero.**	DESNZ	Autumn 2026
Liaison with the Energy Sector and other Critical National Infrastructure			
L1	**ERG will improve liaison with Category 1 and Category 2 responders during significant energy system specific events**	ERG	Winter 2025/26
L2	**ERG will formalise guidance for escalation and management of significant energy sector incidents, including engagement with Ofgem, DESNZ, NESO and other involved parties as applicable.**	ERG	Winter 2025/26
L3	**DESNZ, working across relevant lead government departments and Devolved Governments, will set out principles for how CNI sectors should engage and share information in both preparing for disruption and responding to incidents.**	DESNZ	Winter 2025/26
Restoration of Energy Customers			
R1	**ERG will review existing arrangements and develop industry guidance for the restoration of CNI and other customer energy supplies during unplanned events**	ERG	Winter 2025/26
R2	**As part of the development of the Energy Resilience Strategy and following output of R1, DESNZ will consider if existing legislation should be amended to allow for different treatment of electricity customers which are designated as CNI.**	DESNZ	Summer 2026
R3	**Through the development of the Energy Resilience Strategy, DESNZ will consider the need for a Whole Energy System Emergency Coordinator with specific powers to take response decisions at a whole energy system level.**	DESNZ	Summer 2026
Power Resilience of Critical National Infrastructure			

C1	**ERG will publish essential business continuity guidelines for CNI assets reliant on energy (Gas and Electricity) infrastructure systems to effectively inform CNI operators**	ERG	Spring 2026
C2	**DESNZ to consider messaging for CNI sectors to amplify the importance of energy resilience specifically in business continuity plans. DESNZ and Cabinet Office to play a coordinating role to amplify this messaging**	DESNZ and Cabinet Office	Winter 2025/26
C3	**NESO will review the methodology underpinning CNI designation assessments across the gas and electricity sectors. This will include formalising and updating the Energy CNI thresholds.**	NESO	Winter 2026
C4	**NESO and DESNZ will work together, while considering existing understanding of critical connections to the energy system, to scope options to streamline current mapping of dependencies between Energy and other CNI. NESO will work closely with DESNZ to ensure the appropriate data management process is put in place to deliver this action.**	NESO and DESNZ	Spring 2026
C5	**As part of the Energy Resilience Strategy, DESNZ, working across government, will consider options for embedding power resilience across all CNI sectors.**	DESNZ	Spring 2026
C6	**Ofgem to engage relevant CNI sector regulators, such as the Civil Aviation Authority, on options to incentivise investment in power resilience in their own sectors.**	Ofgem	Winter 2025/26

Glossary

Term	Definition
Clean Power 2030	The Government's aim of achieving zero-carbo electricity grid in Great Britain by 2030
Climate Change	Long term shifts in temperatures and weather patterns as a result of natural variation or human intervention
Configuration	Configuration is the description of how energy network components are connected together, including where electricity is supplied from, and what it in turn supplies. Re-configuration refers to changing how the network is connected together.
Critical National Infrastructure (CNI)	CNI refers to the systems, assets, and services essential to the functioning of the UK. The loss or compromise of these could severely impact national security, public safety, or the delivery of essential services
Distribution network	The network of overhead lines, pylons, poles, underground cables and substations that connect electricity to and from the transmission network and generators to electricity consumers. The distribution networks in England and Wales operate at 132kV and below
Electricity substation	Electricity substations are where overhead lines, underground cables, transformers, and other electrical equipment are connected together creating the network required to connect electricity generation and the end customer.
Extra high voltage (EHV)	Voltage levels above 230kV
kV	Kilovolt, a unit of electrical potential equal to 1,000 volts

Malicious actor	Individuals or groups who intentionally cause harm or disrupt digital systems, networks or individuals for financial gain, espionage or political influence.
National Energy System Operator (NESO)	The National Energy System Operator for Great Britain
National Grid Electricity Transmission (NGET)	Onshore Transmission Owner in England & Wales.
Ofgem	The Office for Gas and Electricity Markets
Private internal electrical distribution network	A private internal electrical distribution network is the infrastructure that distributes energy to a private site, such as Heathrow Airport. These networks are operated by Private Network Operators under an exemption from holding a distribution licence regulated by Ofgem.
Scottish and Southern Electricity Networks Distribution (SSEN)	A local electricity distribution network in South England and North Scotland
Supergrid transformer	At substations, voltages are stepped up or down through electrical devices called Supergrid transformers